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EXAMINER	
AKHAVANNIK, HUSSEIN	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/834,365	Applicant(s) TANIGUCHI ET AL.	
	Examiner Hussein Akhavannik	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-26 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 13 April 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment to the abstract overcomes the objection cited in paragraph 1 of the previous office action (mailed 4/19/2004).

The amendments to the specification overcome the objections cited in paragraphs 2-4 of the previous office action (mailed 4/19/2004).

The amendments to claims 1-2, 9-10, 13-16, 22, and 24 overcome the objections cited in paragraph 5 of the previous office action (mailed 4/19/2004).

Response to Arguments

2. Applicant's arguments, see page 11, paragraphs 5-7 of the Remarks, filed 7/24/2004, with respect to claims 7-9 and 21-23 have been fully considered and are persuasive. The 35 USC 112, second paragraph rejection of these claims has been withdrawn.

3. Applicant's arguments on pages 13-15 of the remarks, filed 7/24/2004, have been fully considered but they are not persuasive.

The Applicant alleges that the instant application does not categorize an input image as in Oami et al, but instead calculates the affect of embedding a selected pattern through the "variation indication data generation means" on page 13, second full paragraph of the Remarks. The Examiner agrees that Oami et al do categorize an input image as explained in the abstract, however, the limitation of not categorizing in not recited in any of the claims of the instant application. Independent claims 1-2 and 13-16 recite "a variation indication data generation means for generating a plurality of variation indication data indicating variation between the object data and each of the object data obtained by embedding each of the plurality of candidate

data". Oami et al illustrate in figure 5 by the image-quality degradation degree calculation section (203) and explain in column 11, lines 40-44, that the image-quality degradation degree calculation section compares the input image (corresponding to the object data) to the watermarked image output (corresponding to the object data obtained by embedding each of the plurality of candidate data) to determine the degradation amount between the two images (corresponding to the variation indication data). Oami et al further explain in column 11, lines 44-58 that the image-quality degradation amount is the ration of the PSNR, WSNR, or JND between the watermarked image and the original image. Therefore, this amount corresponds to the claimed variation indication data.

The Applicant alleges, on page 13, third full paragraph of the Remarks, that Oami et al categorizes an entire image, whereas the instant application processes an input image blockwise. The Examiner agrees that Oami et al do not split the image into plural blocks for processing. However, Ogawa et al illustrate in figure 2 that digital data contents 103 (corresponding to image data) are divided in block data in step 100. Ogawa et al explain in column 7, lines 1-6 that the watermark embedding is performed on a plurality of blocks created from the input digital data contents. Oami et al and Ogawa et al are combinable because they are from the same class and subclass and are both related to digital image watermarking. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to divide an image into blocks and to correspond the watermark information with the image blocks. The suggestion/motivation for doing so is explained by Oami et al in column 8, lines 63-66, wherein Oami et al indicate that any watermarking algorithm may be used. Furthermore, watermarking systems using blocks of

image information are well-known in the art of watermarking in the frequency domain. Therefore, it would have been obvious to combine Oami et al with Ogawa et al.

The Applicant alleges, on page 14, second full paragraph of the Remarks, that Oami et al's method embeds watermarks in the frequency domain, thereby spreading the watermark pattern over the entire image, whereas the instant invention embeds the watermark in the spatial or pixel domain. The Examiner agrees that Oami et al embeds the watermark in the frequency domain. However, the limitation of *only* embedding a watermark in the spatial domain is not recited in any of the claims of the instant application. Furthermore, by dividing the input image into a plurality of blocks, as performed in the system of Oami et al and Ogawa et al, the watermark information would only be spread into the selected image block.

The Applicant alleges, on page 14, third full paragraph of the Remarks, that Oami et al control the strength of the watermark pattern and does not control the pattern pixel-wise. The Examiner respectfully disagrees. By adjusting the strength of an embedded watermark, the system of Oami et al is inherently adjusting the amplitude of the watermark which will adjust the value of the pixels of the final watermarked pixels. Furthermore, the limitation of controlling a watermark pattern pixel-wise is not recited in any of the claims of the instant application.

The Applicant alleges, on page 14, forth full paragraph of the Remarks, that Oami et al require the original image for detecting information. The Examiner agrees. However, Ogawa et al illustrate in figure 2 that coefficients are selected from the block data in step 130 according to key data input in step 12 in order to embed the digital watermark data 12 in step 150. Thus, the key data generated the pseudo-random sequence 125 that corresponds the watermark data (constituent data) with the plurality of image blocks 100 and can be used to extract the

watermark. Furthermore, detecting the watermark according to a key is not recited in the independent claims of the instant application.

The Applicant alleges, on page 15, second full paragraph of the Remarks, that Oami et al adjust the strength of a watermark, whereas the instant application adjusts a predefined pattern to fit in the image and does not have a strength constraint. The Examiner agrees. However, the independent claims of the instant invention only require "selecting one of said candidate data ..." and do not require adjusting a predefined pattern or not adjusting a strength constraint. Furthermore, by adjusting the strength of a watermark, the watermark or "predefined pattern" is being adjusted. The Examiner suggests that the Applicant include the limitation of "spatially adjusting" a predefined pattern.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 5-8, 12-17, 19-21, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oami et al in view of Ogawa et al (U.S. Patent No. 6,704,431).

Referring to claim 1, which is representative of claims 13 and 15,

i. An object processing apparatus for dividing input data into a plurality of object blocks, each object block comprising an array of pixels, and using the object blocks as the object data for embedding is not explicitly explained by Oami et al. However, Ogawa et al illustrate in figure 2 that digital data contents 103 (corresponding to image data) are

divided in block data in step 100. Ogawa et al explain in column 7, lines 1-6 that the watermark embedding is performed on a plurality of blocks created from the input digital data contents. Ogawa et al further explain that the digital data can be composed of pixels in column 7, lines 29-35.

ii. A variation indication data generation means for generating a plurality of variation indication data indicating variation between the object data and each of the object data obtained by embedding each of the plurality of candidate data is illustrated by Oami et al in figure 5 by the image-quality degradation degree calculation section (203). Oami et al explain in column 11, lines 40-44 that the image-quality degradation degree calculation section compares the input image (corresponding to the object data) to the watermarked image output (corresponding to the object data obtained by embedding each of the plurality of candidate data) to determine the degradation amount between the two images (corresponding to the variation indication data). Oami et al further explain in column 7, lines 47-58 that multiple watermarks of different strength (corresponding to S(1), S(2) ... S(M)) are each embedded as plurality of candidate data into the input image data.

iii. A detectability indication data generation means for generating a plurality of detectability indication data each indicating the detectability of the plurality of candidate data is illustrated by Oami et al in figure 5 by the detection result output from the digital watermark detection section (202). Oami et al explain in column 11, lines 30-39 that the digital watermark detection section compares the embedded data (corresponding to the candidate data) to the detected watermark (from the watermarked image) to determine the

degree to which the watermark has been accurately detected (corresponding to how easily each of the plurality of candidate data is detected). The more accurate the detected watermark, the more easily the watermark can be detected in the system of Oami et al.

iv. A watermark selection means for selecting one of the candidate data based on the plurality of variation indication data and the plurality of detectability indication data is explained by Oami et al in column 7, line 66 to column 8, line 16. Oami et al explain that optimal watermark strength is determined by the equation for Z(m), which is a function of the image-quality degradation degree D(k,m) and resistance evaluation value V(k,m). Oami et al illustrate in figure 7 that the resistance evaluation value is a function of the detection result output in figure 5 (which corresponds to the detectability indication data). Once the optimal watermark strength is determined in the system of Oami et al, a watermark of that strength is selected to be embedded into the image data, as explained in column 8, lines 54-56.

v. A data embedding means for embedding the selected candidate data into the object data as the watermark data is explained by Oami et al in column 8, lines 56-62 and illustrated in figure 3 by the digital watermark insertion section 102.

Oami et al and Ogawa et al are combinable because they are from the same class and subclass and are both related to digital image watermarking. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to divide an image into blocks and to correspond the watermark information with the image blocks. The suggestion/motivation for doing so is explained by Oami et al in column 8, lines 63-66, wherein Oami et al indicate that any watermarking algorithm may be used. Furthermore, watermarking systems using blocks of

image information are well-known in the art of watermarking in the frequency domain. Therefore, it would have been obvious to combine Oami et al with Ogawa et al to obtain the invention as specified in claims 1, 13, and 15.

Referring to claim 2, which is representative of claims 14 and 16,

i. An image processing apparatus for dividing input data into a plurality of object blocks, each object block comprising an array of pixels, and using the object blocks as the object data for embedding corresponds to claim 1i, wherein the object data of Oami et al corresponds to image data as illustrated in figure 5 by the input image.

ii. A variation indication data generation means for generating a plurality of variation indication data indicating variation between the image data and each of the image data obtained by embedding each of the plurality of candidate data corresponds to claim 1ii.

iii. A detectability indication data generation means for generating detectability indication data, each indicating the delectability of zero or more candidate data corresponds to claim 1iii.

iv. A candidate data selection means, for employing the detectability indication data to select one of the candidate data that corresponds to variation indication data for variations that are smaller than a predetermined reference is explained by Oami et al in column 8, lines 28-32. Oami et al explain that digital watermark strength calculation section (100 in figure 2) checks to ensure that the image-quality degradation degree D(k,m) (corresponding to the variation indication data) is smaller than a permissible critical value D0 (corresponding to a predetermined reference). The digital watermark

strength calculation section determines the optimal watermark strength, corresponding to claim 1iii, if the optimal watermark strength has an image-quality degradation degree D(k,m) smaller than a permissible critical value.

v. A data embedding means for embedding the selected candidate data as watermark data in the image data corresponds to claim 1v.

Oami et al and Ogawa et al are combinable because they are from the same class and subclass and are both related to digital image watermarking. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to divide an image into blocks and to correspond the watermark information with the image blocks. The suggestion/motivation for doing so is explained by Oami et al in column 8, lines 63-66, wherein Oami et al indicate that any watermarking algorithm may be used. Furthermore, watermarking systems using blocks of image information are well-known in the art of watermarking in the frequency domain. Therefore, it would have been obvious to combine Oami et al with Ogawa et al to obtain the invention as specified in claims 2, 4 and 16.

Referring to claim 3, which is representative of claim 17, the detectability indication data generation means generating detectability indication data indicating the detectability of the candidate data corresponding to the variation indication data indicating variations smaller than the predetermined reference is explained by Oami et al in column 11, lines 30-39. Oami et al calculate detectability indication data for all of the watermark strengths, including those that have a variation indication data smaller than a predetermined reference.

Referring to claim 12, which is representative of claim 26, the detectability indication data generation means generating detectability indication data for the respective candidate data

corresponding to the variation indication data with their value within a predetermined range is explained by Oami et al in column 11, lines 30-39. Oami et al calculate detectability indication data for all of the watermark strengths, including those that have an image-quality degradation degree (corresponding to variation indication data) between 0 and 1, as explained in column 11, lines 58-63.

Referring to claim 5, which is representative of claim 19,

i. Each of the object image data being each of a plurality of image blocks obtained by dividing one image data set is not explicitly explained by Oami et al. However, Ogawa et al illustrate in figure 2 that digital data contents 103 (corresponding to image data) are divided in block data in step 100.

ii. Each of the watermark data corresponding to each of the object image data including one or more type of constituent data constituting additional information that is added to the object image data is not explicitly explained by Oami et al. However, Ogawa et al illustrate in figure 2 that digital watermark data 101 (corresponding to the constituent data constituting additional information) is embedded into the image blocks 109 in step 105.

iii. A watermark data correspondence means for corresponding the constituent data constituting the additional information data with the plurality of image blocks as the watermark data is not explicitly explained by Oami et al. However, Ogawa et al illustrate in figure 2 that coefficients are selected from the block data in step 130 according to key data input in step 12 in order to embed the digital watermark data 12 in step 150. Thus,

the key data generated the pseudo-random sequence 125 that corresponds the watermark data (constituent data) with the plurality of image blocks 100.

iv. A candidate data generation means for generating the plurality of candidate data corresponding to the constituent data corresponding with the plurality of image blocks is not explicitly explained by Oami et al. However, Ogawa et al illustrate in figure 2 that original image blocks are replaced with watermarked image blocks in step 180 in order to output watermarked digital contents in step 104.

Oami et al and Ogawa et al are combinable because they are from the same class and subclass and are both related to digital image watermarking. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to divide an image into blocks and to correspond the watermark information with the image blocks. The suggestion/motivation for doing so is explained by Oami et al in column 8, lines 63-66, wherein Oami et al indicate that any watermarking algorithm may be used. Furthermore, watermarking systems using blocks of image information are well-known in the art of watermarking in the frequency domain. Therefore, it would have been obvious to combine Oami et al with Ogawa et al to obtain the invention as specified in claims 5 and 19.

Referring to claim 6, which is representative of claim 20, the watermark data correspondence means accepting predetermined key data to correspond the constituent data of the additional information data with the plurality of image blocks based on the predetermined key data corresponds to claim 5iii, wherein the key data 12 of Ogawa et al is used to correspond the constituent data of the additional information data with the plurality of image blocks.

Referring to claim 7, which is representative of claim 21, the candidate data generation means generating, as the plurality of candidate data, a plurality of additional patterns employing the same configuration as the object image data to be added to the object image data is explained by Oami et al in column 7, lines 47-57. Oami et al display multiple watermarks (corresponding to constituent data), each exhibiting different watermark strengths. As these watermarks are individually embedded into the object data, a plurality of additional candidate data will be created.

Referring to claim 8, the candidate data generation means generating the plurality of additional patterns by multiplying a plurality of predetermined coefficients with basic patterns corresponding to the constituent data of the image blocks is explained by Oami et al in column 7, lines 47-57. The basic patterns corresponding to the constituent data corresponded with the image blocks are the digital watermarked images illustrated by Oami et al in figure 5. The predetermined coefficients being multiplied with the basic patterns are the digital watermark strengths, which adjust the watermarks by a predetermined amount, corresponding to the desired watermark strength.

6. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oami et al in view of Ogawa et al, and further in view of Zhao et al (U.S. Patent No. 6,141,753).

Referring to claim 4, which is representative of claim 18, the candidate selection means selecting predetermined supplement data, instead of the candidate data, when no candidate data corresponding to the variation indication data for variations smaller than the predetermined reference exist is not explicitly explained by Oami et al or Ogawa et al. Though Oami et al do determine whether a watermark, at a certain strength, exhibits an image-quality degradation

value smaller that D0, corresponding to claim 2, Oami et al do not embed predetermined supplement data if not strengths are smaller than D0. However, Zhao et al explain in column 1, lines 47-51 that visible or invisible watermark may identify the source of a digital work (or image). Identifying the source of a digital work allows the copyright owner of the digital work to determine the pirate who is illegally distributing the digital work as explained by Zhao et al in column 1, lines 26-35. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to embed a predetermined watermark, such as the watermarks 203 and 205(1) illustrated by Zhao et al in figure 2, when no candidate data corresponding to the variation indication data for variations smaller than the predetermined reference exist in the system of Oami et al and Ogawa et al because the digital work will always be protected with the presence of a watermark and potential pirates may be identified.

7. Claims 9 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oami et al in view of Ogawa et al, and further in view of Kita et al (U.S. Patent No. 6,707,927).

Referring to claim 9, which is representative of claim 22,

i. The detectability indication data generation means calculating the detectability indication data representing a correlation between the additional patterns and the basic patterns is explained by Oami et al in column 11, lines 30-39. Oami et al explain a correlation value between 0 to 1, which is calculated by the difference (or correlation) between detected embedded watermark (corresponding to one of the additional patterns) and the digital watermark (corresponding to the basic pattern).

ii. The candidate data selection means selecting, from among the additional patterns, a pattern corresponding to detectability indication data representing the highest

correlation is explained by Oami et al in column 7, line 66 to column 8, line 16. The greater the correlation between the embedded watermark and the digital watermark, the greater the detectability value in the table of Oami et al. A high detectability value (or equivalent resistant-evaluation value) has a positive effect (+aV(k,m)) on the selection of the watermark strength. Therefore, the watermark strength chosen in the system of Oami et al exhibits the greatest detectability value.

iii. A watermark data detection means for detecting the watermark data embedded into the image block, based on the correlation of the basic patterns and an image block into which the selected additional pattern is embedded is not explicitly explained by Oami et al or Ogawa et al. However, Kita et al explain in column 2, lines 27-33 that a watermark can be detected by determining the difference between a watermarked image (an image block into which the selected additional pattern is embedded) and an original image (basic pattern). Kita et al explain that this watermark detection method is used in a watermarking system for preventing the degradation of image quality as far as possible in column 2, lines 11-16. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to detect watermark data embedded into image blocks based on a correlation between the basic pattern and an image block into which the selected additional pattern is embedded as explained by Kita et al in the watermarking system of Oami et al and Ogawa et al because both systems are directed towards increasing the imperceptibility of a watermark.

Referring to claim 23, this claim corresponds to claims 8 and 9ii.

8. Claims 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oami et al in view of Ogawa et al, and further in view of Hobson et al (U.S. Patent No. 6,633,653).

Referring to claim 10, which is representative of claim 24, the watermark data correspondence means sorting the plurality of image blocks into one or more groups, each of which including one or more of said image blocks to correspond the constituent data with the image blocks that are included in the groups is not explicitly explained by Oami et al or Ogawa et al. However, Hobson et al explain sorting the blocks of an input image into two groups: one group having a variance greater than 50% and the other having a variance less than 50% in column 6, line 62 to column 7, line 4. Hobson et al explain that only the image blocks exhibiting a variance of less than 50% are considered good candidates for watermarking because these blocks have low visibility and high confidence, thereby rendering the watermark imperceptible and robust. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to sort the plurality of image blocks into one or more groups and apply a watermark to only those groups as suggested by Hobson et al in the system of Oami et al and Ogawa et al because the watermark imperceptibility and robustness would be increased.

9. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oami et al in view of Ogawa et al, and further in view of Oami (U.S. Patent No. 6,697,499).

Referring to claim 11, which is representative of claim 25, the variation indication data generation means calculating each the difference between each of the entropy values for the object image data and each entropy value for the object image data obtained by embedding each of the plurality of candidate data as the variation indication data is not explicitly explained by Oami et al or Ogawa et al. Oami et al explain determining the image-quality degradation amount

(corresponding to the variation indication data) by using the PSNR or WSNR or JND values of the watermarked image in column 11, line 40 to column 12, line 5. Oami et al do not explicitly explain determining the difference between the entropy values. However, Oami explains in column 16, line 61 to column 17, line 6 that an entropy value can be determined instead of a JND value in order to characterize the variance of an image. The entropy of an image is well-known in the art to define the activity of the image. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the entropy of an image, as suggested by Oami, instead of the PSNR or WSNR or JND values, as suggested by Oami et al and Ogawa et al, in order to determine the variance between an original image and a watermarked image because Oami explains that JND values can be substituted by entropy values and entropy is well-known in the art to describe the activity of an image.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein Akhavannik whose telephone number is (703)306-4049. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H. Boudreau can be reached on (703)305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hussein Akhavannik H.A.
January 9, 2005

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